REMARKS

Drawings

Regarding the Replacement Sheet for Fig. 2, filed on November 17, 2006, the Examiner states, "The Applicant amended Fig. 2 to show relief volumes #50. The relief volumes erroneously have lines drawn on only three sides instead of on four sides, depicting the relief volumes #50 as extensions of electrical device #14." *Advisory Action of 12/01/06.*

The Applicant has enclosed a new Replacement Sheet for Fig. 2 with this Response.

Rejections under 35 U.S.C. 103(a)

Regarding the Remarks made by the Applicant on November 17, 2006, the Examiner states "Andric et al. shows a lower surface of the heat-conducting member (#56) including a relieve volume (unlabeled) that prevents the lower surface of the heat-conducting member from contacting a top surface of a component of the electrical device. As illustrated, if the relief volume show in Fig. 4 on the lower surface of the heat-conducting member is omitted, then a top surface of integrated circuit #60 would contact the lower surface." *Advisory Action of 12/01/06.*

The Applicant has amended claims 1 and 13, and respectfully traverses the rejection.

Claim 1 has been amended to clarify that the "lower surface of the heat-conducting member includes one or more relief volumes that prevent the heat-conducting member from contacting one or more components of the electrical device." Claim 13 has been amended to clarify that the "enlarged end of the heat-conducting post includes one or more relief volumes that prevent the heat-conducting post from contacting one or more components of the electrical device." These amendments are supported by the Specification, which states, "[S]imilarly, the lower surface 21 of member 20 can itself define relief volumes 50," and by Fig. 2.

With respect to claim 1, the Applicant respectfully contends that Andric et al. does not disclose the heat-conducting member including one or more relief volumes that *prevent* the heat-conducting member from contacting one or more components of the electrical device. With respect to claim 13, the Applicant respectfully contends that Andric et al. does not disclose the heat-conducting post including one or more relief volumes that *prevent* the heat-conducting post from contacting one or more components of the electrical device.

Rather, as shown in Figure 4 of Andric et al., heat transfer apparatus 50 is in *contact* with IC 60 by means of first thermal interface layer 74.

As described in the Specification, "heat transfer apparatus 50 may also include a first thermal interface layer 74 *positioned between the upward facing backside surface of IC 60 and an upper wall of the cavity dimensioned to receive IC 60.* First thermal interface layer 74 thermally couples IC 60 to heat sink 56." (col. 6, lines 14-18).

As further described in the Specification, thermal layer 74 of heat transfer apparatus 50 is "preferably made of materials with changes phase (i.e., flows) to *fill air pockets between IC 60 and heat sink 56*, and to *fill microscopic irregularities in contacted surfaces of IC 60 and heat sink 56*...." (col. 6, lines 19-22).

Clearly then, IC 60 of Andric et al. is in contact with heat sink 56. Andric et al. even notes that in this configuration, "*heat sink 56* of heat transfer apparatus 50 *is in more effective thermal communication with* both *the IC* and the substrate...." (col. 7, lines 26-29).

As such, Andric et al. does not disclose the inventions of claims 1 and 13, nor does it disclose the inventions of dependent claims 2-3, 5-12, and 14. The Applicant respectfully requests reconsideration and allowance of all pending claims.

If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned in Westborough, Massachusetts, (508) 898-1501.

Respectfully submitted,

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